The Status of the Genus Rhinopsis, with Description of a New Species from Texas (Hymen.: Ampulicidae).

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Rhinopsis was founded by Westwood for his species abbottii which is a synonym of canaliculata. Authors have usually looked upon its sole distinguishing character as being the absence of the first transverse cubital vein, and since this vein is not constantly present in some species of Ampulcar, and also since some of the forms that lack it do not seem to be closely related in other respects to others, there has been a tendency to consider Rhinopsis an unnatural group, which should not be recognized even as a subgenus.

Authors seem to have overlooked a character which the type of *Rhinopsis* shares with all of the known new world species that possess only two submarginal cells, namely that the first section of the subdiscoidal vein (m of the Comstock-Needham terminology) is continuous with the second recurrent, there being no trace of a second section of the subdiscoidal (longitudinal M₂ of Comstock and Needham). The continuous subdiscoidal and second recurrent veins enclose an elongate third discoidal cell which is gradually narrowed toward the apex and there more suddenly terminated by the upcurving second recurrent.

This character I have observed in *canaliculata* Say, in *ferruginea*, n. sp., in *trigonopsis* Smith, and it is shown by the figure of *maculicornis* Cameron in the Biologia Centrali Americani to obtain in that species. There are no other new world species known to have only two submarginal cells.

In all of the other Ampulex that I have seen, new or old world species with three submarginal cells, or old world species with two, including the European fasciata Jurine, the second section of the subdiscoidal vein is present, the first meets the second recurrent at an angle, and the third discoidal cell is not gradually narrowed but terminated by the more or less rectangular second discoidal vein.

It therefore seems that our American species allied to canaliculata form a natural group which may be properly accorded at least subgeneric rank.

KEY TO SUBGENERA OF AMPULEX.

Subdiscoidal and second recurrent veins of fore wing continuous, not meeting at an angle, the apical section of the former vein wanting. First transverse cubital vein wanting. Color black or ferruginous, never strongly metallic. Neotropical and Nearctic Regions, Rhinopsis Westwood.

Subdiscoidal and second recurrent veins not continuous, the latter inserted at an angle on the former, which it divides into a basal section and an apical section. Two or three submarginal cells. Colors usually, but not always strongly metallic. Old and new worlds. Ampulex Jurine.

Specimens of the only known nearctic species of Ampulex are looked upon as such rarities that the discovery of a second form is of considerable interest. The form hereunder described is very closely related to A. canaliculatus Say, and differs chiefly in being, except for the abdomen, entirely yellowish ferruginous, instead of black. Structurally it differs from a specimen of A. canaliculata before me but slightly, chiefly in the sculpture of the mesopleura, in two pits on the vertex, and in the fact that the petiole appears a little longer. Whether these are individual or persistent distinctions, it will take additional specimens to decide. If not a morphologically distinct species, it doubtless represents a geographical color form.

Ampulex (Rhinopsis) ferruginea n. sp.

3. Entirely ferruginous except the abdomen beyond the petiole, which is piceous and polished, and the petiole which is testaceous. Wings hyaline, a fuscous area abruptly delineated basally across the wing beneath the stigma, but gradually disappearing before the apex; a small cloud also at the apex of

the submedian cell. Length 8 mm.

Head roundly but strongly contracted behind the eyes, the occiput not distinctly margined, but inferiorly with a weak tubercle or suggestion of the termination of a carina (canaliculata has these and the bordering carina of the occiput a little stronger); inner margins of the eyes very slightly divergent toward clypeus; clypeus strongly convex medially, depressed beneath each antenna, a trace of a median carina visible on its crest only at extreme apex, where it becomes a short apical mucronate tooth, the apical border otherwise rounded; surface of clypeus minutely pubescent, and with some longer hairs apically, the median convex part crossed by a faint transverse impression (strong in canaliculata); mandibles slender, attached normally beneath the eyes, with a very short malar space; dis-

tance from foramen magnum to buccal orifice two-thirds the length of the third antennal segment; distance between ocelli one-half of the minimum distance between them and compound eyes; minimum width between eyes four-fifths the length of segment 3 of antenna; this about six times longer than the pedicel, two and one-half times longer than the scape; segments 4 and 5 about equal to each other and to the scape, the two together about one-eighth shorter than segment three; front with a round lobe overlying the base of each antenna, leading above into a very short and weak frontal carina; no median carina; front and vertex opaque, with evenly scattered fine punctures; a pit behind each posterior ocellus (absent in canaliculata).

Pronotum longer than wide, the anterior half divided by a median sulcus into a right and left rounded ridge, the dorsal surface with weakly indicated suggestion of fine rugosity, anteriorly this is only on the summits of the ridges, but covers the entire dorsal surface posteriorly; lateral surfaces smooth and impunctate. Mesonotum with sharply defined parallel parapsidal furrows, extending from anterior to posterior margins, with weakly defined lateral furrows on the posterior half, and with two short furrows between the parapsidals on the anterior margin; surface smooth, and chiefly between the parapsidal furrows with minute ill-defined punctulation, regularly but not closely distributed, just discernible at x35 magnification; a pit-like depression near the postero-lateral angles, which are in turn somewhat elevated, slightly hood-like. Scutellum with deep lateral foveae, its disc sculptured like the middle section of the mesonotum; postscutellum impunctate; mesopleura obsoletely rugulose, in places somewhat reticulate, but without distinct rows of punctures as in canaliculata. Epienemial carina sharp; pleura separated from the mesosternum by a poorly defined depressed line, scarcely a definite sulcus. Mesosternum smooth; at x35 scattered setigerous punctulation is evident, and a background of minute shagreening. In this species and in canaliculata the mesosternum between the middle coxae is convexly rounded, not flattened and not forming a strong ridge or median line; posteriorly the ordinary furcula is replaced by a downward projecting U-shaped translucent lamina, which connects one hind coxa with the other. Posterolateral area of propodeum with a small erect tooth; dorsal surface of propodeum horizontal, at right angles to the vertical posterior face; dorsal surface with a weak median carina, and four lateral carinae on each side, the fourth bounding the top of the lateral face; the first lateral pair, distant at the base from the median, approach it and finally disappear before uniting

with it apically, setting off between them a triangular area which is darker in color than the rest of the body; the next two pairs of lateral carinae closer to each other than to the first pair, and the second and third a little closer than the third to the fourth; the median triangle radially striated at base, transversely at apex, the interval between carinae 1 and 2 transversely striated, that between 2 and 3 as likewise 3 and 4 transversely striate but the striae sufficiently short and separated to form rectangular meshes; the lateral faces obsoletely rugulose, contrasting with the smooth metapleura below them; the posterior face slightly rounded, with a very weak vertical median carina, and obsoletely transversely wrinkled, but not above.

The forewings have entirely lost all trace of the first transverse cubital vein. The united first and second submarginal cells extend about half way from the tip of the median cell to the wing apex. The marginal cell is long and pointed, its extreme tip slightly removed from the margin, forming a very small appendiculate cell. The second transverse cubitus is transverse. The first and second sections of the radius are of about equal length, longer than the third, which is about equal to the second transverse cubital vein. The third transverse cubitus curves obliquely outward to the cubital vein. third discoidal cell is elongate gradually and evenly narrowed until just before the apex the terminating curve becomes pronounced; this by reason of the unusual fact that the first section of the subdiscoidal vein (m of Comstock-Needham system) is entirely continuous with the second recurrent, there being no trace whatsoever of the second section of the subdiscoidal (longitudinal M_2 of the Comstock-Needham system). arrangement ferruginea has in common with A. canaliculata. The hind wing does not differ materially from Kohl's figure of A. compressa, except that the apical part of the anal vein, the part beyond the submedian cell, is wanting. Femors slender, thickest at the basal third and evenly tapered to the apex; metatarsus .55 of length of tibiae; tarsal segments in proportion of: 9:4:1.5:1:2.2; ultimate segment, as usual, inserted near base of penultimate; claw with an oblique median tooth on the inner margin.

Petiole (measured from apex of hinging nodules at base to where it suddenly enlarges at base of first tergite) as long as the second tarsal segment. Abdomen impunctate, polished and shining, the second tergite little wider than the apex of the first, the third tergite about one-third the length of the second, the

apical ones narrowly exposed.

Texas: Liberty, 18, March 18, 1908 (E. G. Tucker). Holotype in the United States National Museum,